

Appl. No. 10/628,768  
Amdt. dated October 20, 2004  
Reply to Office action of July 20, 2004

Remarks/Arguments

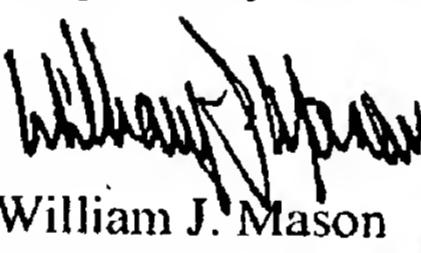
The present invention, as specifically defined in the amended claims, relates to a biological safety cabinet in which the fan used to draw from the work chamber is isolated from contamination, thereby enabling repair or replacement of the fan without the need to observe hazardous material procedures. Isolation of the fan is achieved by drawing the contaminated air from the work chamber through a first HEPA filter before the air contacts the fan, which is located in a fan enclosure downstream of the first HEPA filter. Air from the fan enclosure is discharged under positive pressure so that a portion of the air is returned to the work chamber and a portion of the air is discharged through an exhaust port in the fan enclosure. In an especially preferred embodiment specifically claimed in independent claim 12 and the claims dependent thereon, a second HEPA filter is placed between the fan enclosure and the work chamber. This second HEPA filter aids in creating a positive pressure and serves as an additional safety feature to prevent contaminated air in the work chamber from reaching the fan in the event there is a loss of airflow. Importantly, the fan is the only means for conveying air within the cabinet. Otherwise, the required positive pressure is not achieved.

Original claims 1-5, 7, 8 and 10-16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over either Thakur et al. or Landy. Claims 6, 9 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over either Thakur et al. or Landy in view of Calsteren et al. Reconsideration and withdrawal of the rejections as they might be applied to the amended claims is respectfully rejected.

Neither Thakur nor Landy disclose an apparatus in which the fan is isolated from contaminated air. Specifically, neither patent discloses a fan within a fan enclosure with a HEPA filter being positioned across the fan enclosure inlet to filter the contaminated air before it enters the enclosure. In Thakur, air flows from the work chamber though conduit 25 directly onto fan 30. In Landy, air is conveyed from the fan into the work chamber and then exhausted, without even being returned to the fan (see Fig. 3). Further, there is no suggestion in the patents alone or in combination that would lead one skilled in the art to modify the disclosures to achieve applicant's result. Calsteren et al., at most, discloses that it is known to place a filter over an exhaust port, and adds nothing to the teaching of either Thakur or Landy that would result in isolation of the fan.

For the forgoing reasons, and in view of the amendments to the claims, it is believed that this application now defines a patentably distinguishable invention and is accordingly in condition for allowance. Such action is respectfully solicited.

Respectfully submitted,



William J. Mason  
Registration No. 22,948

Date: October 20, 2004  
File No. 5011-017

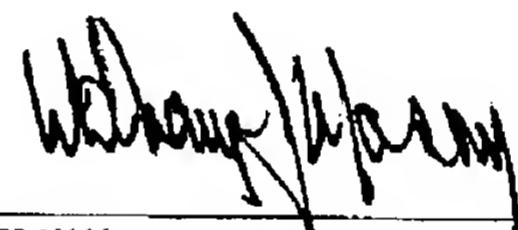
**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

Honorable Director of Patents and Trademarks  
Alexandria, VA 22313  
Sir:

**CERTIFICATE OF TRANSMISSION**

Date of Deposit: October 20, 2004

I hereby certify that this paper, which is an Amendment for the BIOLOGICAL  
SAFETY CABINET S/N 10/628768 is being sent via facsimile 703-872-9306 to the  
United States Patent and Trademark Office on the date indicated above.



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William J. Mason  
Registration No. 22,948

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